

HOME PLANTING BY DESIGN

LANDSCAPE ART

One hundred years ago the Commissioner of Agriculture, Horace Capron, in his report to the President, U. S. Grant, wrote:

Landscape gardening is a comprehensive art, combining the genius of the landscape painter with the art of practical gardener; the exact knowledge of the engineer with the poetical imagination of the artist. The professor of this art should also possess a competent knowledge of the general principles of botany, architecture, geology, hydraulics, hydrostatics, mechanics, laws of heat and ventilation, pomology, and vegetable physiology.

If you are one of today's homeowners, much of this expertise is available to you in the wide range of gardening information developed by the Agricultural Research Service. This includes information on soils and drainage; plant pests and diseases, and how to prevent or control them; plant materials; and the recommended planting procedures and good care essential for strong, healthy plants.

The information in this leaflet is designed to help you, whether you want to refurbish a tired landscape, or start from "scratch" on the grounds around a new house. These guidelines are provided to help you plan your landscape planting. Because conditions differ widely from one area of the country to another, and even from one part of a county to another, these guidelines are not meant to be specific for your situation. Rather they are to serve as general principles that would apply anywhere. For local adaption, talk with your county agricultural agent or nurseryman. Your nurseryman or landscape architect will be glad to help even though you are planning a do-it-yourself project.

For information on planting and care of lawns, flowers, and ornamental shrubs and trees, visit your county agent or write to the Agricultural Research Service, U.S. Department of Agriculture, FCB, Hyattsville, Md. 20782. The Department will send you a list of its publications for home gardeners. These are for sale by the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

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GUIDELINES FOR PLANNING AND PLANTING THE HOMESITE

What do you want from the grounds around your home? A backyard that is little more than an outside “attic” for storage and discard? A hodgepodge of incidental plantings and accidental lawn?

Your backyard can be a garden, or just a backyard. The difference is planning. One landscape architect says that a garden is outdoor space around private homes, enclosed for the use and pleasure of the family. Where this concept prevails, the garden becomes an outdoor extension of the home.

Taken in its broadest sense, this idea—that the garden is an outdoor extension of indoor living space—calls for organization of outdoor space to match uses of indoor space. For instance, outdoors you should define public and private areas and organize the private areas into work, play, and living space. Indoors, walls serve to separate living activities. Outdoors, shrubs, hedges, fences, and building walls offer privacy, separate activities, and create background for objects, both utilitarian and decorative.

In looking at your outdoor space, you will need to envision what you want to do with each area. If you have children, how much of the yard

will they require as their play space?

Do you need space for touch football, badminton, a swimming pool, or just a swing and sandbox? For yourself, do you want just a pleasant place to sit? Or do you want an outdoor grill and patio? Do you want a vegetable garden? How large?

What views are good from the house? Do you need trees to frame the view, or the house? Do you need trees to shade the roof of the house, the patio, or the lawn? Do you have a view, or service area, that needs screening, either from the house or from the street?

You will think of other questions that govern your own situation. These give you an idea of the kind of questions you must ask yourself in determining design and use of space in your outdoor living room. “Use planning” of space is, in fact, the key to design and planting.

Whether you are beginning home-site planting on a bare lot around a new house, or want to give new life to a tired, uninspired yard, there are certain basic principles you need to follow. For the sake of organization, consider three broad, basic, and perhaps overlapping categories: Natural factors, family needs and preferences, and the plan itself.

SAMPLE LEDGER OF ASSETS AND LIABILITIES OF MY PROPERTY

	<i>What's Good</i>	<i>What's Bad</i>
House -----	_____	<u><i>Too big for lot</i></u>
Orientation (Sun exposure) -	<u><i>Just right</i></u>	_____
Garage -----	<u><i>Big enough to store equipment</i></u>	_____
Driveway -----	<u><i>"Curvey" — nice for planting</i></u>	_____
Walks -----	_____	<u><i>Not enough</i></u>
Soil -----	_____	<u><i>Hardpan; acid</i></u>
Grass -----	_____	<u><i>Bare spots</i></u>
Shade Trees -----	<u><i>Adequate</i></u>	_____
Shrubs -----	<u><i>Good blend of de- ciduous & ever- green</i></u>	_____
Vegetable Garden -----	_____	<u><i>None</i></u>
Cut-flower Garden -----	<u><i>Good space for flowers</i></u>	_____
Service Area -----	_____	<u><i>Garbage cans can be seen from road, need screen- ing</i></u>
Play Area -----	_____	<u><i>Too small and too public</i></u>
Utility Lines -----	<u><i>Fairly well hidden</i></u>	_____
Retaining Walls -----	_____	<u><i>None, but needed</i></u>

Note: Add to this, and also add other observations about your property.
Are the downspouts adequate to carry water away from basement walls?
What about fences? Flower beds? Borders?

Natural Factors



When you start planning, the first step will be to analyze your natural assets and limitations. Set up a “ledger” for garden assets and liabilities, listing everything you know or can find out about the physical aspects of your property.

This will include all elements of the environment—

- **Soils**
- **Climate**
- **The orientation of the house on the land**
- **The topography**
- **Existing trees and shrubs.**

In the environment there will be factors over which you may have little or no control—like the weather, the subsoil, and exposure to sun. But you need to know about them in order to take advantage of favorable conditions and, in so far as possible, avoid trouble from the unfavorable ones.

SOILS

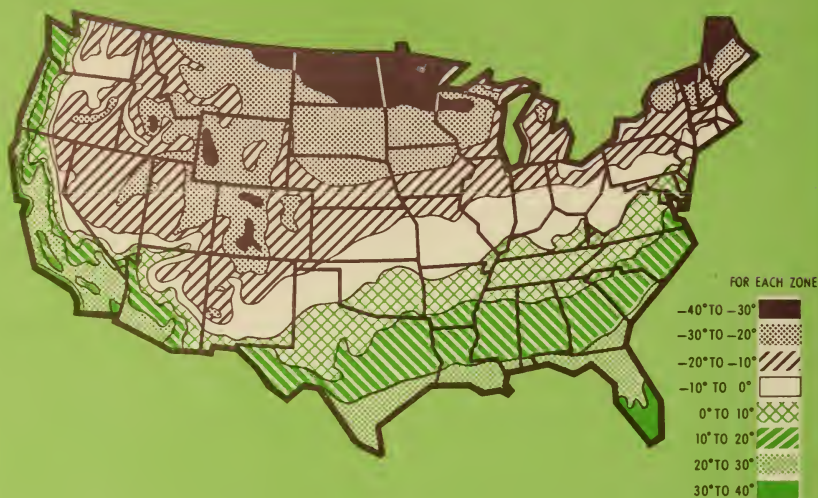
For instance, you need to know what kind of soils you have and to what extent you can improve condi-

tions if your soil is poor. A soils test will show whether your soil is acid or alkaline. If the test is made by your county agent, he will probably tell you what minerals you need to add for the kind of plants you expect to grow.

If your soil presents a problem—clay, hardpan, or too sandy— you may find it necessary to alter or replace it, at least in small areas where you want to garden or plant trees or shrubs. If you replace the soil you take out of a hole dug for a tree or shrub, you provide a soils environment in which that plant can survive. You should be providing a root zone that will allow the rain to soak in—not run off nor just stand in the hole to give your plants “wet feet.”

CLIMATE

You can’t alter the weather, but you can allow for it. Take into account the temperature range for your area, with minimum lows and maximum highs. You can get a plant zone map from the U.S. Department of Agriculture, with lists of trees and shrubs that thrive best in your temperature zone. It would be well, too, to consult your county agent or local nurseryman. Their experience could help you avoid choices of plants that would not tolerate your local weather conditions, saving not only money but also loss of growing time.



APPROXIMATE RANGE OF AVERAGE ANNUAL MINIMUM TEMPERATURES

Find out about the average rainfall and its distribution throughout the year, if you are new to the community. If your area suffers from prolonged dry seasons, be sure to provide adequate facilities for watering your garden or favorite trees and shrubs. If strong winds are your local hazard, you may want to plant wind-breaks or use walls or fences to shelter otherwise vulnerable plants.

ORIENTATION

The placement of your house on the lot and its relation to the sun and prevailing wind is important, too. If you have a voice in the placement of your house, well and good. You will want to see that it meets zoning requirements with regard to lot lines, and that it is placed to best suit the climate (especially with regard to

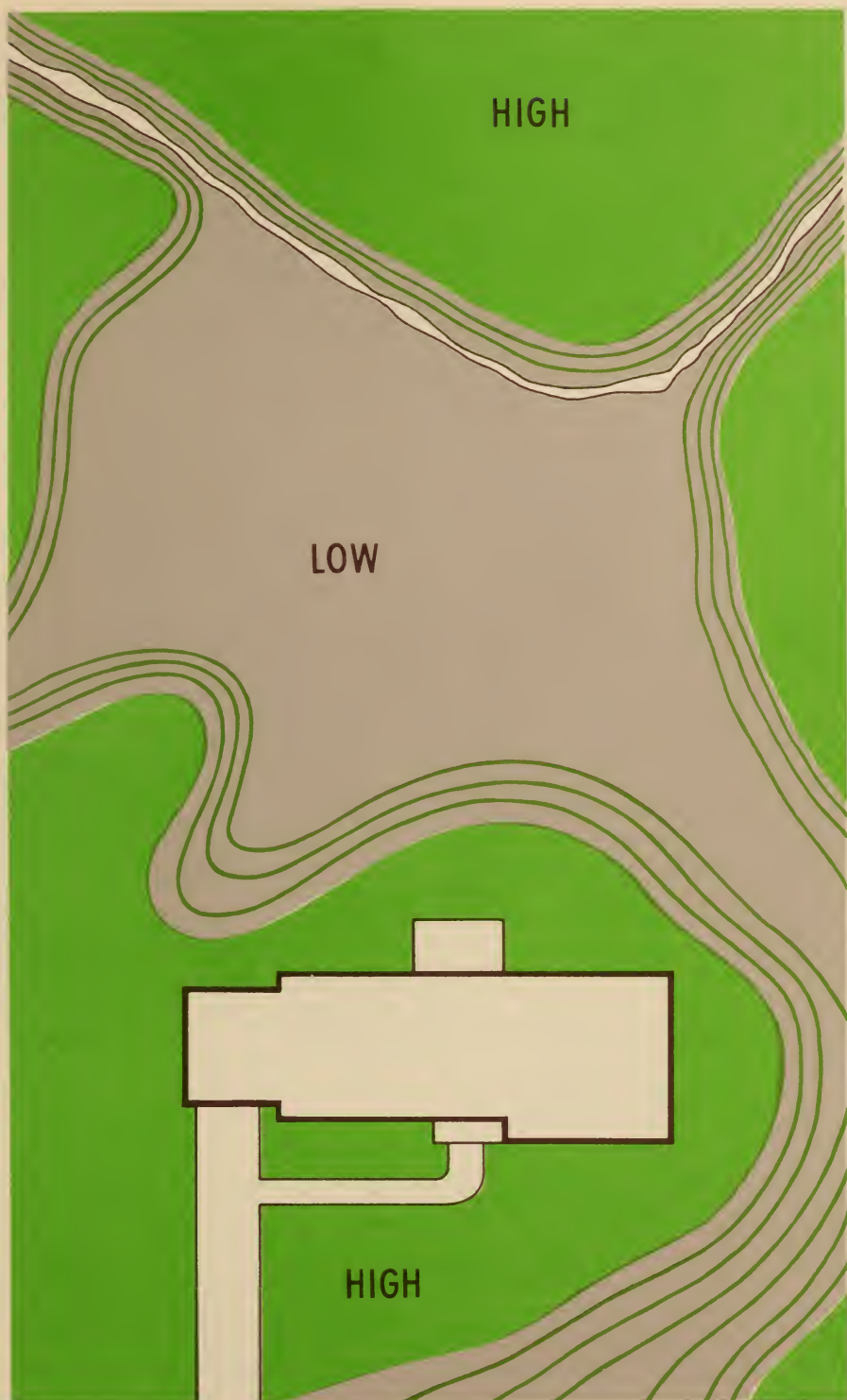
exposure to the sun), and to satisfy your need for privacy.

If your house is already built, then you may want to think of the kind of plants to provide shade for areas that otherwise would be overexposed to intense summer sun. It is said that properly placed shade trees can reduce summer room temperature of a frame house in an arid climate by as much as 20 degrees. This can be translated into dollars if you are paying for air-conditioning.

TOPOGRAPHY

The lay of the land will influence your landscape design and your choice of plant materials. Unusual natural formations can break the monotony and help you develop a yard of distinction.

For instance, you may have a residual stream bed, a depressed



marshy spot, or even an outcropping of rocks. Perhaps you can capitalize on such seeming disadvantages to add excitement and interest to your overall plan. The stream bed might be screened with shrubs and used as a natural play area for the children. The depressed, marshy spot might be lined for a little pool and used for water plants. The outcropping of rocks is a "natural" for a rock garden, with succulent and exotic or alpine plants.

One of the most common problems, especially in housing developments, is a sloping bank, which is often steep and troublesome to mow. One imaginative homeowner, faced with two such banks, planted one with trees, shrubs, and groundcovers, saving one end for a heather garden. The other he had graded into five terraces, 10 feet wide. These terraces became his vegetable garden. Both plantings made good use of the space and eliminated difficult mowing.

If such natural features are in the wrong place or simply don't fit in with your own needs and preferences, you may have to resort to grading and fill to achieve the yard you want.

But whatever your own lot offers, you will need to consider the physical assets and disadvantages.

PLANT MATERIALS

In your analysis of the natural factors to be considered, make careful note of any trees or shrubs that are already on the lot. You may want to make a special checklist, entering them by species, number, and other characteristics that would influence your decisions on what to keep or eliminate. Mark the ones you want to save. If you don't want to save any, or if your building plans require removal of some, keep a record of the

kinds native to that environment. This natural association will help you in buying new plant materials. Try to combine plants that originated under the same, or similar, conditions of light, shade, moisture, soil, and so on. Getting plants that are compatible will help you achieve unity and make for a more successful garden.

Although the type of soil and the climate sometimes limit the use of certain plants, there are plants for almost every kind of situation. Choose carefully.

THE CARPET

This — choosing carefully — goes double for the grass. Grass is the best of all the ground covers because it can be walked on, played on, and trampled; it stands up to rough use so long as it is fertilized, watered, cut regularly, and weeded now and then. Temperature and moisture largely determine the adaptation of grass.

Since grass is an important component of your grounds, choose the kind of grass for the use it will have, the climate, and your ability to care for it.

Walkways also become a part of the "carpet" and are a basic part of the overall design. Let the kind of garden you want govern both the placement of the walkways and the kind of materials used in making them. In a formal garden, your walkways would be well defined, probably with square corners, but curving or "free flowing" in the informal plan. Materials used also contribute to the spirit of your garden, adding both texture and color. For instance, in many formal gardens the walkways are brick or fine gravel; in informal gardens, the choices are almost unlimited—flagstones, wooden rounds, cement and gravel, or what have you.

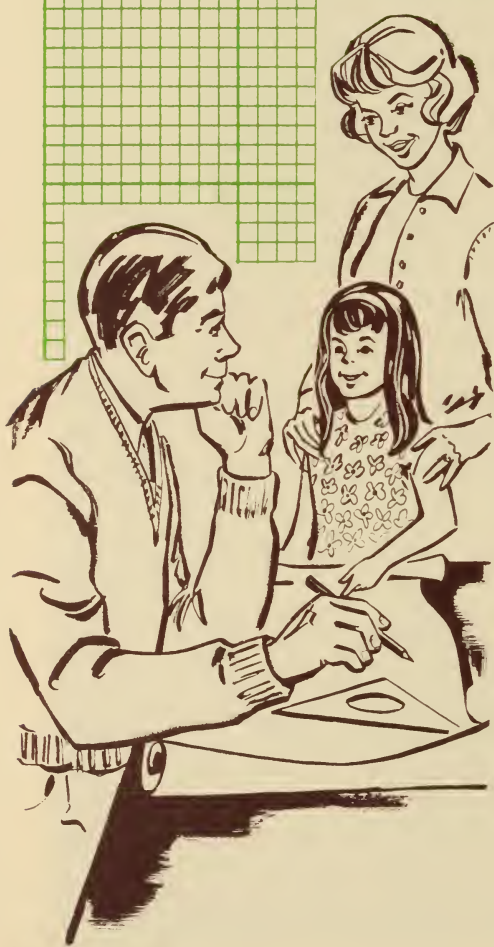
CHECKLIST OF PLANT MATERIAL ON MY LOT

TREES

Kind	No.	Size (Mature)	Deciduous	Bloom	Evergreen

SHRUBS

Your Wants and Needs



Before getting down to the plan itself, decide how much time you are willing and able to give your grounds. Do you like to work in the yard? Do you have plenty of time for the essential chores? Or do you have good help available?

A garden, to serve any of the purposes for which it was intended, will need some care. Some yards require more than others. Often, the amount of attention required can be lessened by careful planning at the start.

Do you have plenty of patience? Remember that it takes time for trees and shrubs to grow. Allow for this in the planning stage. Quick-growing trees may be required for specific purposes or sites. But often, quick-growing trees are short-lived and may have to be replaced early. This isn't necessarily bad but should be taken into account in your plans, with replacements ready for the day when the quick-grower has to be retired.

Although trees and some shrubs are slow-growing, they mature eventually. Some trees can achieve a good deal of height in a few years. This you will need to recognize, too, for they may outgrow your house, and even your lot. Some people make the mistake of forgetting that trees and shrubs grow two ways—sidewise as well as up—and before they know it they have a jungle in their yards.

With the wide range of plant materials available, with increased hardiness in many old favorites to extend their growing range, and with the continuing development of new hybrids with special qualities of desira-

bility, you can surely satisfy your personal preferences. Tell your nurseryman what kinds of trees and shrubs you prefer and let him help you find varieties suitable to your local growing conditions.

Along with your preferences, consider the needs of your family. As you do, you will want to arrange for public, private, and service areas, including the driveway and approach to the house; play areas for children, a pleasing place to relax, and vegetable and cut-flower gardens if wanted; and the service area where garden tools might be stored, garbage held for pick-up, trash burned, and laundry hung out to dry. With a landscaping plan, these areas can be separated by shrubs and the eyesores screened from the public and from your own view of the garden area.

To be sure that all of your needs and wants get their rightful attention, make a list of them to help you when you talk with your county agent, nurseryman, or landscape architect. Having everything down on paper helps in your own thinking, and will be of value to your professional adviser.

If you are starting from "scratch," you will have the rare opportunity of planning the house and grounds as a single, interrelated unit. This is the ideal—to give an overall happy relationship between ground and architecture. The Japanese customarily design house and garden at the same time, since they consider the garden as important as the building. Thus, they gain complete harmony between the two.

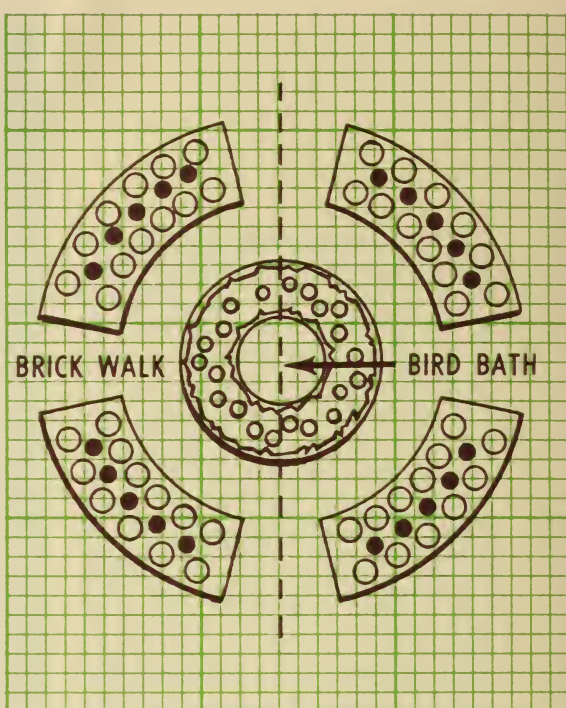
the Plan

Since you don't want your garden, like Topsy, to just grow, you will need a plan. With a plan, you can plant all at once, or piecemeal, as you can afford. A plan—even though not ideal—allows for flexibility in its execution.

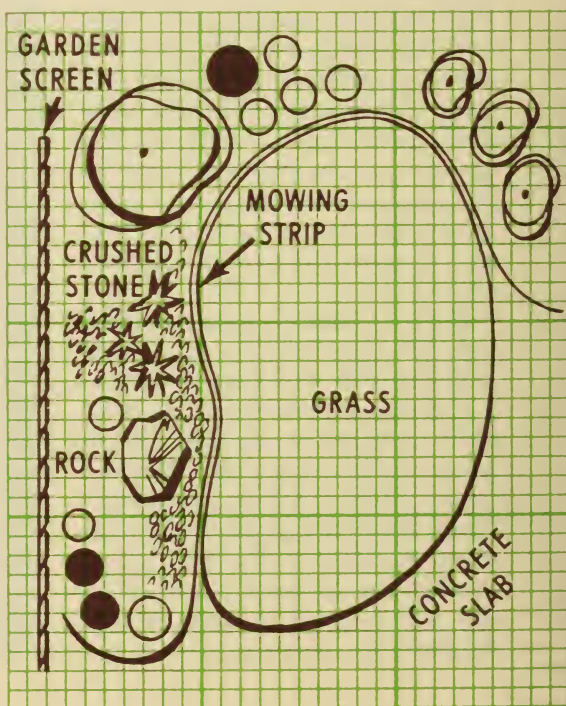
Landscape architects suggest three choices in landscape design: a **formal design**, *where the balance is symmetrical*; **informal**, *where the balance is achieved without complete symmetry*; or a **combination of the two**.

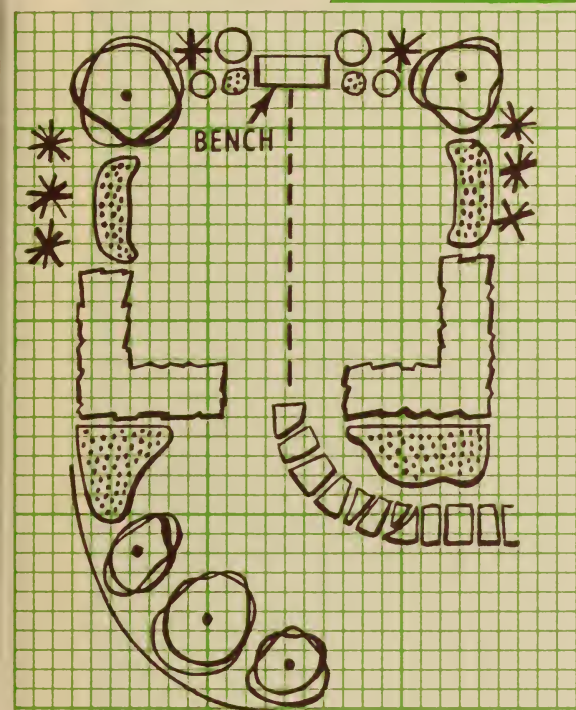
Formal design was popular in colonial days and is seen in many of the country's historic gardens—Mt. Vernon, Williamsburg, Va., and in the Longwood Gardens, Kennett Square, Pa.

If you want a formal design, draw a line down the center of your garden area. Duplicate whatever is placed on one side exactly on the other side. This applies to rocks, paths, statuary or whatever, as well as to the plants. Formality is heightened by seeing that plants are clipped, lines are straight, and edges clearly defined. Retaining walls and different levels must be used to add interest.



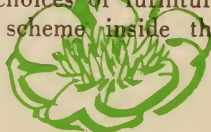
In the **informal balance design**, both sides of an imaginary center line are in balance with each other, *but* informal balance is accomplished by grouping plants differently on each side, using sizes and colors of plants to obtain a feeling of balance. A natural look is retained by leaving the plants unclipped, using curving lines, with obscure and merging edges, and following natural contours in the garden. Japanese gardens are famous for their informal balance and have greatly influenced today's landscaping design.

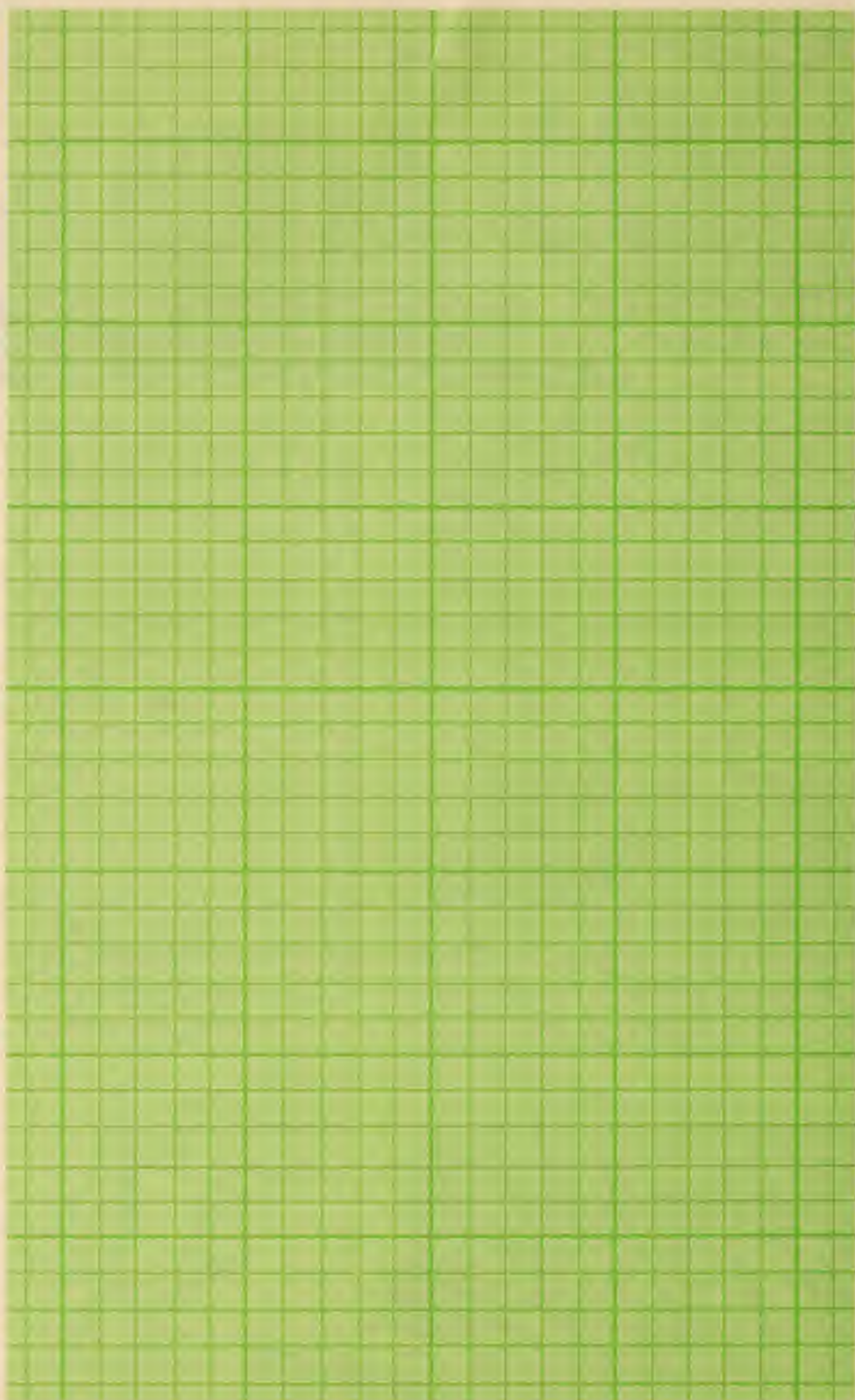




Don't be afraid to **combine formal and informal balance**. Many homeowners today are achieving pleasing effects by doing just that.

Most homeowners do not have the opportunity to plan their houses and gardens together. If you are buying a new house, the chances are that the builder has probably provided a minimal, so-called foundation planting—leaving the personalized landscaping to you. Even if you are living in a home with an established yard, you can put your own imprint on the grounds, just as you would with your own choices of furniture and color scheme inside the house.





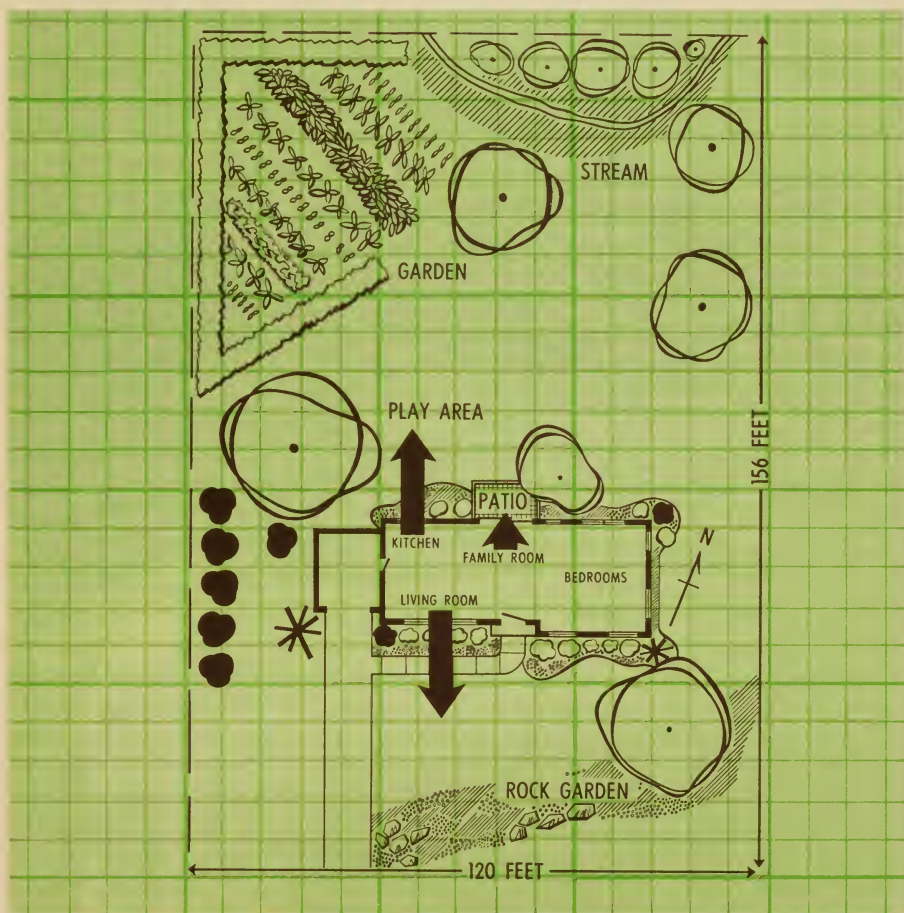
GETTING TO WORK

Here are suggestions that may be useful for you.

If you have not already done so, this is the time to start working with the loan plat showing the lot lines drawn to scale, the location of the house on the lot, the driveway and walk areas, other structures, fences, easements, and so on. You probably have such a plat attached to the deed to your property. If not, you should be able to get a copy from the loan company or the builder. When you

talk with the builder, or loan office, ask if topographical data are available showing the drainage and grades on the lot. This will be useful and save you time.

With this material in hand, you will want to transfer essential information to a map of your own drawing on graph paper—so that all the entries are made to scale. Don't forget to indicate doors and windows in the house, because their locations will govern the placement of plants in your yard. You would want, for instance, to plant a "view" out the



kitchen window for the lady of the house if she spends a good deal of time at a work counter with a window above it. You would want the utility area of your yard near the service door of the house.

In addition to the house and other structures, driveway, and walks, show existing plant materials, if any. You will find it useful to adopt symbols for the different kinds of plants—grass and ground covers, low-growing shrubs, high shrubs, specimen trees, and shade trees. You might even want to use “flat” or horizontal symbols for the plants on the loan plat, and vertical ones in a separate drawing to give a sense of height and scale.



Here are simple forms you could adapt.



SHADE TREE



CONIFER



TALL SHRUB



LOW SHRUB



GROUND COVER



FLOWERS



HEDGE

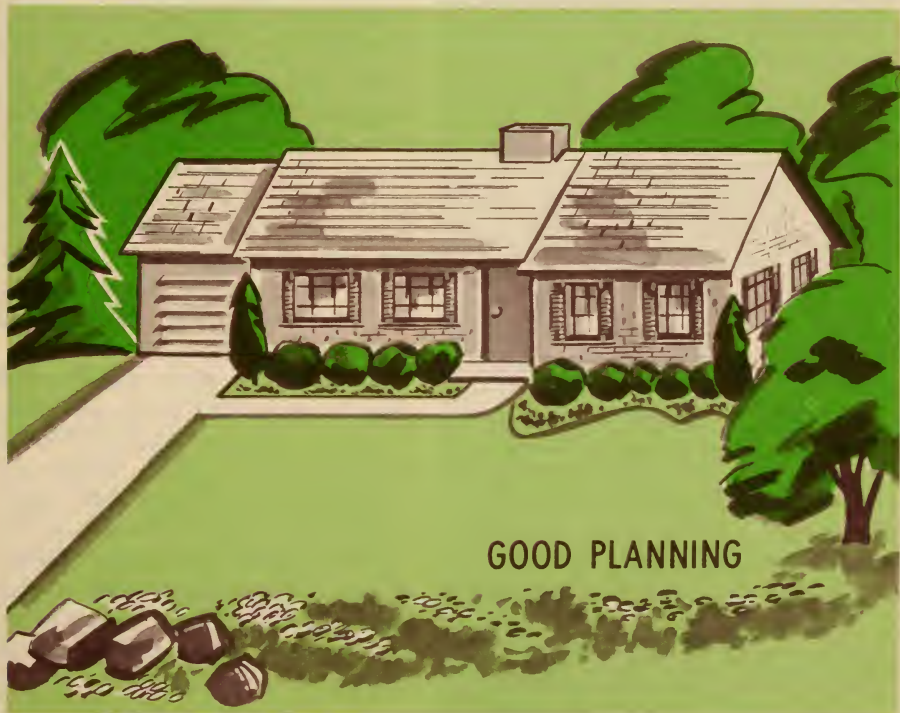
For added ease in working with the plan, you could use one color for the items already on the property and another for the plants you want to add.

Now you are at the point where you have to make specific decisions with regard to the plant materials for your grounds. In addition to meeting specific needs—like shrubs for screening or trees for shade—you will also want to choose materials that are pleasing to behold. To really make your outdoors an extension of your indoor living space, you will want it to be just as attractive, livable, and pleasing as the indoors.

In addition to balance, already mentioned, other considerations help make a garden a delight to the senses. Scale, color, outline, texture, and even fragrance need to be evaluated.

SCALE

Scale applies to the relationships in height and width of your house and the plant materials on your grounds. This relationship really concerns the ultimate height and spread a plant will attain, not its size at the time of purchase. By your choice of scale you can create various illusions and effects.



For instance, if you live in a small one-story house, your natural solution for a tree as the main accent to the house would be a medium-sized tree that grows to about 30 feet. That would be in scale. If you wanted your house to appear larger than it really is, you might choose a tree that grows to about 15 feet. On the other hand, a tree that grows to 120 feet would dwarf your house and make it look like a toy. Of course, it takes many years for a tree to reach such a height; and, if you are planting a young tree, you might find that for the length of time you will live there, the taller-growing tree might still be satisfactory.

Whatever effect you wish to achieve, especially if it is distorted, it should be planned, and not the result of an accident.

Use three dimensions in your plant materials. This ties in with scale. Consider the plant material from the tallest shade tree down to the grass and ground cover. Careful choices will help you to avoid monotony and insure an interesting, attractive, and natural-looking planting.

Decide on the large tree to complement your building. It should serve to join your garden and the sky sympathetically. Depending on your area and lot, you might choose a tulip tree, sweetgum, or a plane tree for this role. In the Plains States, your choices might include spruce, pine, or some of the poplars.

Next, you will want to plant an "understory" tree or large shrub, one that has horizontal, rather than upright or drooping branch habits, and one that grows well under other trees. Possible selections include the flowering dogwood, doublefile virburnum, or western dogwood. The Chinese dogwood is not so common, but it blooms later and has attractive leaves.

If you live in a community where

you must forego the tall shade tree and the understory tree, consider an overhead arbor or trellis as a substitute. It will contribute to the desired three-dimensional effect.

Near and under the understory tree, you can plant evergreen or broad-leaved evergreen shrubs, such as azaleas, rhododendrons, or leucothoe. In the West, buckthorn, lilac, cotoneaster, spirea, and honeysuckle offer possibilities. For a more pleasing effect, group three or five shrubs together; don't plant just one.

And last, use a layer of ground cover, such as ivy or myrtle, to give the finishing touch and unify the whole.

With such a plan, you will have four different levels to attract the eye, as well as differing shades of green and differing textures of leaf. (More about texture later.)

Where builders provide a foundation planting, they tend to use only evergreens. Many homeowners also prefer them next to the house. But in making choices for the garden, the home landscaper should consider deciduous plants, which lose their leaves in winter, for the beauty of their flowers, fruit, and leaf color, which change with the seasons. Many of these plants are lovely and interesting not only when they are in leaf or flower, but for their structure. They can contribute beauty of shape and outline in winter.

For dramatic effect, combine the conifers, or needled evergreens, with deciduous plants and broadleaved evergreens. The conifers usually are dark green but at times their shade of green varies to the blue or yellow side. Perhaps because of their silhouette or because the needles absorb rather than reflect light, they strongly accent the garden. Choose them wisely.

COLOR

You have been dealing in the various shades of green. Now consider the addition of color through the use of flowering or fruiting trees and shrubs.

The flowering dogwood, which blooms in spring, is colorful in the fall with its brilliant red berries and is attractive in winter for its branch and twig patterns. Viburnums, hollies, and pyracantha offer varying shades of yellow to red in their fall fruits. Pyracantha and viburnums are especially attractive espaliered alongside walls or fences. And so are roses and some fruit trees.

Many homeowners go all out for trees and shrubs that flower in the spring and forget that many others provide bloom in mid- and late-summer. Crapemyrtle, Chinese dogwood, and goldenrain tree can extend your flowering season. The goldenrain tree also offers a change from the pinks and whites of most flowering trees—to yellow—a relatively rare color among flowering trees. Two other trees with yellow blossoms are cornelian cherry and goldenchain tree.

TEXTURE

Look for differences in texture, too. Texture may be fine, medium, or coarse with gradations in each. Plant texture of a deciduous shrub or tree may appear heavy and coarse in winter when its branches and twigs are bare. But in summer, when it is covered with medium-sized leaves, it may have a medium texture and a fine texture in spring if the blossoms are small. Using a variety of textures of leaves and branches is good, and avoids monotony.

FINE



EUROPEAN LARCH

MEDIUM



CRABAPPLE

COARSE



RED OAK

VARIETY



BAMBOO

FLORAL COLOR

Flowers are a fragile element of landscape design, but they offer much-desired color through the spring and summer and some into the fall. They should be used with background structure. Just as a chest in the living room needs the strong structural background of a wall to complement its color and shape, so flowers need the support of a wall, fence, shrubs, or trees.

Choose flowers, not only for color and fragrance, but to supply interest through the changing seasons. Be careful, for instance, not to concentrate on flowers that bloom early and are gone; try to have several different kinds that will bloom from early spring to fall.

Keep in mind the purpose you want the flowers to serve. If, in addition to providing garden color and relief from monotony, you also want to have cut flowers to take indoors, choose some varieties that have long-lasting bloom after cutting. If you plan extensive cutting of blooms, try to have a cut-flower garden away from your display areas so that cuttings will not deplete your "show" places.

Fragrance may be an incidental consideration. But some people think so highly of the delicate fragrance of lilac and the nighttime sweetness of honeysuckle that they especially want them in their plantings. These may be ruled out by allergy-conscious folks. But, if you want fragrance, consider it in the light of the other contributions your favorite plants would make to your garden.

LAST, BUT NOT LEAST

Two other rules—perhaps rated as behavioral—are good to follow. They

seem almost to contradict each other, but are wise and valuable guidelines, especially for the amateur landscape gardener. These two principles involve restraint and repetition.

Use restraint in the selection of types of materials, using as few different types as possible. One reason for restraint is that you are dealing with living, growing, ever-changing materials. They need room to develop. It is better to use too few materials than too many. Restraint will help unify your garden by making it harmonious.

Coupled with restraint, is repetition. It is wise to repeat the same texture, the same color, or various tones of the same color, in different parts of the garden. This repetition also makes a contribution toward unity and keeps the garden from being "too busy."

Don't carry either—restraint or repetition—too far. Avoid having all your plants a uniform size, texture, and color. Vary their heights and try to use at least three textures and either two complementary or two contrasting colors and their tones.

Be a good neighbor. Don't plant a tree that will be a pest to your neighbor. Don't plant a tree or large shrub too close to the lot line. If you do, you may be the loser. In many States, the law provides that a neighbor may trim off all branches that hang over the line on his side. This could leave you with an unbalanced and unsightly tree, to say the least.

A last don't. Don't forget that living things require food, water, and tender, loving care. Plants have their likes and dislikes, just as they have their own characteristics and life-spans. It takes time to make a garden. The most fundamental precept of all, then, is patience.

Area Treatments

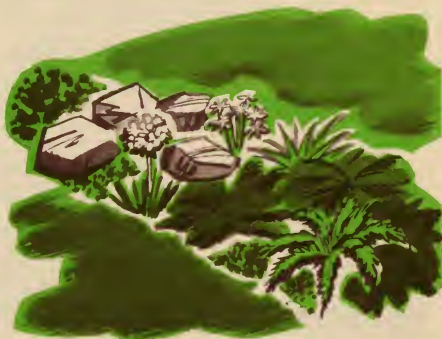
DOORWAY

Keep plantings around doorway small . . . use evergreens that retain small size and don't require constant pruning.



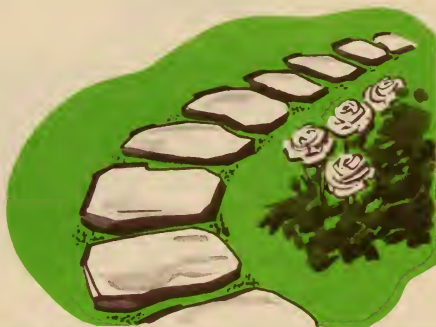
STEEP BANK

Do you have a slope to your lawn that is hard to mow? Try a rock garden, or plant a low ground cover like vinca (periwinkle), ivy, or crown vetch.



AMPLE WALKWAYS?

If foot traffic is taking its toll, try flagstones, or wooden rounds, for a walkway.



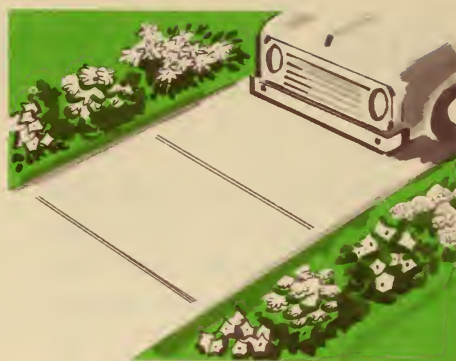
PLAY AREA

If the children's play area faces on neighbor's lot, or on a side street, try a screen of privet hedge between your yard and the neighbor.



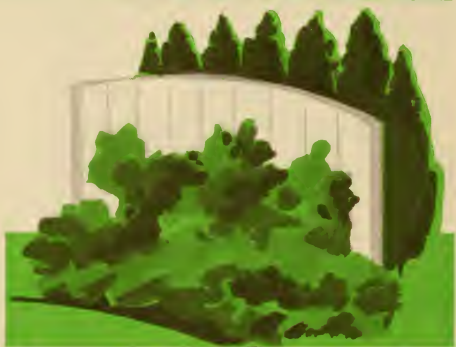
DRIVEWAY

Does your driveway look too utilitarian? Try a border of perennial flowers.



WINDBREAK

Try a windbreak to protect vulnerable plants. You can plant one of evergreens, or build a fence of redwood, plastic squares, or plywood.



TREE PROTECTION

To protect the base of your trees from the lawn mower, lay a wide circle of mulch around it. This has the further advantage of holding moisture.



DIMENSION

An arbor or trellis helps give dimension to your plantings if you can't have a tall shade tree. And vines can give quick privacy, if you need that.



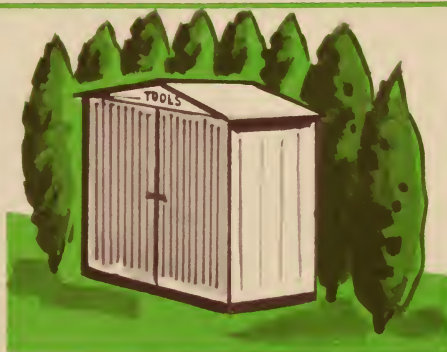
BORDER

Define flower beds with a border of bricks laid flat, stones, or mulch. This helps control weeds, and gives wheel room for your mower.



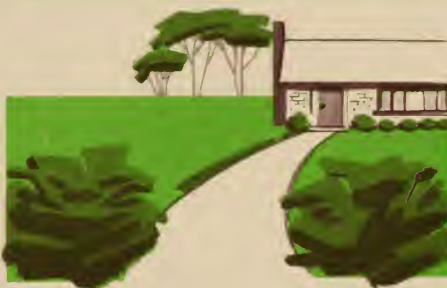
SCREEN

Evergreens, interspersed with annuals, make a good screen around a tool shed.



FRAME

Frame your entrance from the street, but do not obstruct the view. Low-growing shrubs on either side of driveway, or sidewalk if it leads to street, make attractive “welcomes”.



CAMOUFLAGE

Camouflage service area with ornamental fence or evergreen shrubs, especially nice way to hide garbage cans.



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